

dynamic™ 



SOLUTIONS

PRODUCT CATALOGUE FOR POWERCHAIRS AND SCOOTERS



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INTRODUCTION

Dynamic Controls is committed to enhancing people's lives. Our philosophy is built on combining an intimate understanding of the needs of mobility product users with our R&D design skills. This has enabled us to be the world's premier supplier of electronic control systems for power wheelchairs and scooters for over 30 years.

Our products range from cost effective integral controllers to a world leading modular control system that can be customised to suit a wide range of user needs. In addition we have a range of scooter controllers suitable for small, lightweight mini shoppers to rugged outdoor scooters. All our products are renowned for reliability.

Dynamic Controls is unique in that we specialize in the medical mobility market. This means we are able to offer our customers an unrivalled level of experience and support.

Dynamic Controls is a global organization with corporate headquarters in New Zealand and regional offices in the United Kingdom, North America and Asia. To find out more please visit www.dynamiccontrols.com



Dynamic Controls maintains a rigorous quality management system and is independently audited to the exacting requirements of ISO13485.

PRODUCT FAMILY SELECTION GUIDE

Wheelchair Controllers

High Performance system designed for higher power rehab chairs. Based on a modular design with the flexibility to integrate a wide range of input and control devices.

DX2 / DX



Reliable solution for most standard power chair applications. Suitable for mid range power requirements with options to support actuators, lighting and attendant control.

SHARK



Cost effective integrated controller suitable for any lower power drive application. Ideal for lightweight or folding chairs.

A-SERIES



Scooter Controllers

Range of high quality, reliable scooter controllers ideal for higher power applications.

RHINO



Cost effective scooter controllers available in 50A and 90A variants.

R-SERIES



DYNAMIC CONTROLS DX/DX2 COMPONENTS

Master Remotes



DX2-REM550/551
Advanced Joystick Remotes



DX-REMG90
Joystick Remote



DX-REMG91/G91S
Display Remotes



DX-REM34B
Joystick Remote

Secondary Remotes

DX-ACU1
Attendant
Dual Control



DX-RJM
Remote Joystick



DX-RJM-HD
Heavy Duty
Joystick



Power Modules



DX2-PMA70/70L/90/90L
DX2 Power Modules
70 or 90A (120A boost)
With or without lighting



DX-PMB / PMB2
Power Module
60 or 80A

DX-PMB2-S
Single channel Power Module
160A



DX-SLM
Servo Lighting
Module

Actuator Modules



DX2-ACT2/ACT4
DX2 Actuator Modules
2 or 4 channel



DX-CLAMB
Combined Lighting Actuator Module



DX-REM41D
Tray Remote



DX-REM32B
Chin Control Remote



DX-REM35B
Tray Remote



DX-ACU3B
Attendant Master Remote



DX-RJM-MINI
Mini Joystick



DX-RJM-VIC-CCD
Finger Joystick



DX-ACC4B
Switch Input



DX-SNP
Sip & Puff Input



DX-ARC5
Actuator Remote Control



DX-ARC-SWB
Actuator Remote Control



DX-LM-Z
Lighting Module

Environmental Control



DX-ECU
Environmental Control Unit



DX-IRIS2
IR Transmitter



DX-MTX
IR Mouse Transmitter



DX-PCMR
IR Mouse Receiver



DX2



WHEELCHAIR CONTROL
SOLUTION

THE DX2 SYSTEM

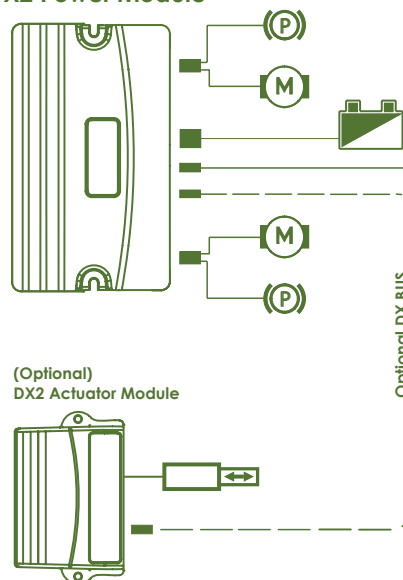
DX2 is a modular power chair control solution that expands the proven DX system through the addition of powerful new components. These allow the design of a rehab power chair that will meet the requirements of any user ranging from drive only control to full environmental control.

The DX2 system is designed to maximise comfort and user control, is easy to set up and maintain and is highly reliable.

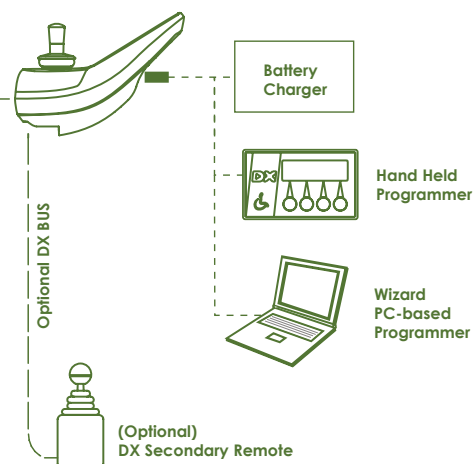
Key Features

- Large full-colour LCD display with intuitive graphical user interface
- Smooth fine control of seating
- Compact powerful power modules with optional built-in lighting
- Reduced set up time through system programming backup
- Backward compatible with DX system

DX2 Power Module



DX2 Master Remote



Master Remotes

DX2-REM550

DX2-REM551

Actuator Modules

DX2-ACT2

DX2-ACT4

DX-ARC5

DX-ARCSWB

Other

DX-ACC3

DX-SKT-X4

Power Modules/Lighting

DX2-PMA70

DX2-PMA70L

DX2-PMA90

DX2-PMA90L



Product Tree

Programming

WIZARD

DX-HHP

Secondary Remotes

DX-ACU1

DX-RJM

DX-RJM-HD

DX-RJM-MINI

DX-RJM-VIC-CCD

DX-ACC4B

DX-SNP

Environmental Control

DX-IRIS2

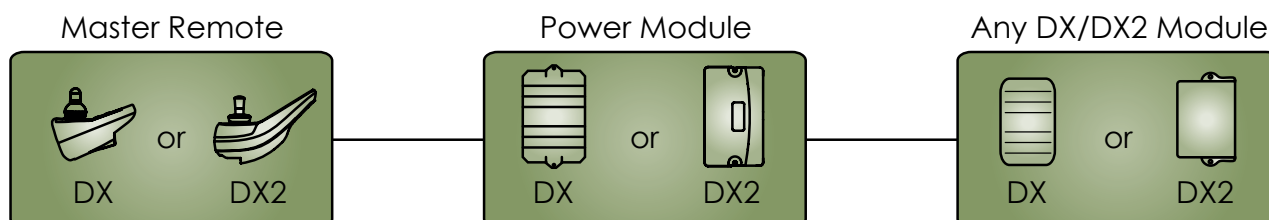
DX-ECU

DX-MTX

DX-PCMR

DX/DX2 SYSTEM CONFIGURATIONS

A key feature of the DX2 system is backwards compatibility with the DX system. This means that DX2 and DX modules may be used within the same system.

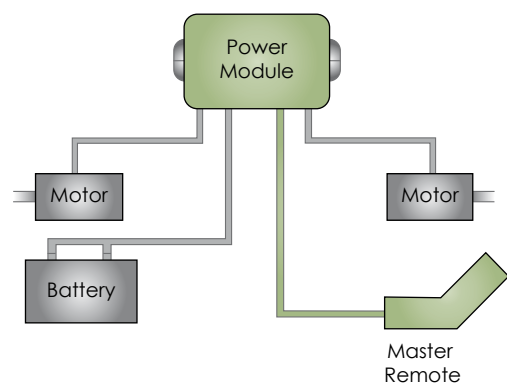


The modules required for some typical applications are listed below.

Application		
User Control Configuration	Drive Only	Drive + Lights, Actuators
Joystick - Armrest mounted	DX2-REM550	DX2-REM550
	DX-REMG90A	DX-REMG90A
	DX-REM34B	DX-REM34B
Joystick - Mid or tray-mounted	DX-REMG91 & DX-RJM	DX-REMG91 & DX-RJM
	DX-REM41D	DX-REM41D
	DX-REM35B	
Joystick for heavy duty use	DX-REMG91 & DX-RJM-HD	DX-REMG91 & DX-RJM-HD
Chin Joystick	DX-REMG91 & DX-RJM	DX-REMG91 & DX-RJM
	DX-REM32B	
Tray Switches	DX-REMG91 & DX-ACC4B	DX-REMG91 & DX-ACC4B
Head Switches	DX-REMG91 & DX-ACC4B	DX-REMG91 & DX-ACC4B
Single Switch Control	DX-REMG91S	DX-REMG91S
Sip N Puff Breath Control	DX-REMG91 & DX-SNP	DX-REMG91 & DX-SNP
Thumb, Tongue or Chin Control	DX-REMG91 & DX-RJM-MINI	DX-REMG91 & DX-RJM-MINI
Finger Control (no force)	DX-REMG91 & DX-RJM-VIC-CCD	DX-REMG91 & DX-RJM-VIC-CCD
Attendant control only	DX-ACU3B	DX-ACU3B (actuators only)
	DX-REMG90A	DX-REMG90A
IR Environmental Control or PC Mouse Control	DX2-REM550/551	DX2-REM550/551

DX/DX2 MASTER REMOTE SELECTION GUIDE

Check the following table for a quick reference to the options on each Master Remote.



	Joystick	Display	No. buttons	Internal switch interface	Battery gauge	Maximum no. drive modes	Maximum speed knob	Lock	Seat controls	Lighting controls	Environmental controls	Computer mouse control
DX2-REM550	✓	Col LCD	7		✓	5		✓	✓	✓	✓	✓
DX2-REM551	✓	Col LCD	5		✓	5		✓	✓	✓	✓	✓
DX-REMG90	✓	LED 7seg	6		✓	5		✓	✓	✓	✓	
DX-REMG90A	✓	LED 7seg	6		✓	5		✓	✓	✓	✓	
DX-REMG90T	✓	LED 7seg	6		✓	5		✓	✓	Lighting Menu	✓	
DX-REMG91		LED 7seg	4	✓	✓	5			✓	✓	✓	
DX-REMG91S		LED 7seg	4	✓	✓	5			✓	✓	✓	
DX-REM34B	✓	LED 7seg	12		✓	5		✓	✓	✓		
DX-REM41D	✓	LED 7seg	12		✓	5		✓	✓	✓		
DX-REM32B	✓		1			1	✓		Via DX-ARC			
DX-REM35B	✓		1			1	✓		Via DX-ARC			
DX-ACU3B	✓	LED 7seg	3		✓	5			✓			

DX2 MASTER REMOTES

DX2-REM550/551 Advanced Joystick Remote



DX2-REM550

The DX2 Master Remotes are stylish high-end joystick remotes with a large, clear, full colour LCD screen. They provide easy control and a high level of functionality to a wide variety of users.

Key Features

- Large, clear colour LCD screen with icon-based screen controls
- Light sensor to select indoor and outdoor display mode
- Low-force joystick with proportional or four-quadrant control
- Direct access to computer mouse and environmental control modules
- Display adapts for right or left-hand mounting
- Battery gauge, real time clock and key pad controlled lock
- Programmable function keys to give direct access to chair functions
- Three jack sockets for multi-purpose external button control

Part numbers

Master Remote

DX2-REM550	Master Remote with colour LCD and 7 buttons
DX2-REM551	Master Remote with colour LCD and 5 buttons
also required – DX BUS cable	

External Buttons (if required for external jack sockets)

Please refer to DX Switches section for details of external buttons

Technical Specifications

Material	Plastic
Protection Rating	IPX4
Operating Temp	-25°C to 50°C
Storage Temp	-40°C to 70°C

Size	211 x 88 x 153 mm
Weight	1100 grams
DX Connectors	2 DX BUS Connectors

DX2 POWER MODULES

DX2-PMA70/70L/90/90L



DX2-PMA70L

The DX2 power modules are the workhorses of the DX2 system and provide fast, precise control of high power drive motors. They are a robust solution for mid, rear and front wheel drive configurations.

- 70A or 90A with optional built in lighting
- Programmable current boost
- Built in 3 channel lighting for indicators, hazard lights, driving lights
- Programmable Drive Control Input (DCI)
- System programming backup
- Service scheduler indicator
- Comprehensive fault protection

Part numbers

Power Modules

DX2-PMA70	70A power module
DX2-PMA70L	70A power module with lighting
DX2-PMA90	90A power module
DX2-PMA90L	90A power module with lighting

Connector Kits

DX2LOOM-PM1	DX2 Battery & Motor Connector Kit for DX2-PMA70, DX2-PMA90
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or

DX2LOOM-PM2	DX2 Battery & Motor Connector Kit for DX2-PMA70L, DX2-PMA90L
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Motor Connectors

GCN60326	DX/DX2 Motor Housing – left motor only
GCN60327	DX/DX2 Motor Housing – right motor only
or	
GCN60325	DX/DX2 Motor Housing – left or right motor (unkeyed)
GCN60323	Connector Key to configure GCN60320 for left or right use
GCN65129	Boot for battery/ motor connectors

Technical Specifications

Material	Black painted aluminium alloy
Protection rating	IPX4
Operating Temp	-25°C to 50°C
Storage Temp	-40°C to 65°C

Size	180 x 106 x 43 mm
Weight	1040 grams
DX Connectors	2 DX BUS Connectors

DX2 ACTUATOR MODULES

DX2-ACT2/4



DX2-ACT2



DX2-ACT4

The DX2 actuator modules are simple to set up yet are highly configurable. Proportional joystick controlled actuators give smooth, fine control of seating for improved comfort. The use of multiple actuator modules allows control of up to 12 actuators with minimal wiring.

- Proportional, switched, latched and bi-directional operation
- Soft start and stop of actuators to increase user comfort
- Simultaneous control of multiple actuators
- Independent extend and retract drive current limits for each actuator
- Individual actuator connections
- Status LEDs for each channel
- No direct battery connections
- Actuator Control Input (ACI) allows external switches to control actuators and drive speed

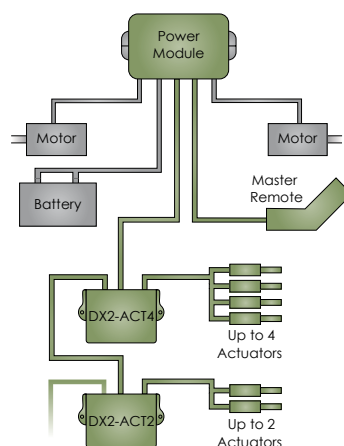
Part numbers

Actuator Modules

DX2-ACT2	2-channel actuator module
DX2-ACT4	4-channel actuator module

Connector Kits

DX2LOOM-ACT	Connector Kit for DX-ACT2/ACT4
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Technical Specifications

Material	Plastic	Size	114 x 72 x 25 mm
Protection rating	IPX4	Weight	300 grams
Operating Temp	-25°C to 50°C	DX Connectors	2 DX BUS Connectors
Storage Temp	-40°C to 65°C		

DX2 CONNECTORS

DX2 Power Module Connector Kits

DX2 Connectors are available in kit form or individual parts.

- DX2 Power Module Kits include all connectors for motors and batteries

Part numbers	# per Power Module
Connectors Kits	
DX2LOOM-PM1 DX2 Battery & Motor Connector Kit for DX2-PMA70, DX2-PMA90	1
or	
DX2LOOM-PM2 DX2 Battery & Motor Connector Kit for DX2-PMA70L, DX2-PMA90L	1
also	
Motor Connectors	
GSM60182 DX/DX2 Motor Connector Kit	2
or	
GCN60326 DX/DX2 Motor Housing – left motor only	1
GCN60327 DX/DX2 Motor Housing – right motor only	1
or	2
GCN60325 DX/DX2 Motor Housing – left or right motor (unkeyed)	2
GCN60323 Connector Key to configure GCN60325 for left or right use	2
GCN65129 Boot for battery/ motor connectors	2
GCN0794 Connector Crimp Contacts for parkbrake (0.25 – 0.5mm ² wire)	4
GCN0781 Connector Crimp Contacts for motor	4
Battery Connectors	
GME65146 DX2 Battery Connector Housing	1
GCN8002 Connector Crimp Contacts for battery (6 – 10mm ² wire)	2
GCN65129 Boot for battery/motor Connectors	1
Accessory Connectors (required for lights and DCI)	
GME65147 Accessory Connector Housing	1
GCN65128 Accessory Connector Boot	1
GCN0794 Connector Crimp Contacts for 0.25 to 0.5mm ² wire	7
or	
GCN0793 Connector Crimp Contacts for 1.5 to 2.5mm ² wire	7

DX2 Actuator Connector Kits

Available in kit form or individual parts.

Part numbers	# per module
Actuator Connectors Kit	
DX2LOOM-ACT Connector Kit for DX2-ACT2/ACT4	1
Connectors and Contacts	
GME65345 Actuator Connector housing	2 or 4
GME65347 Actuator Control Input (ACI) connector housing	1
GME65326 ID Configuration blank plug for ACI (for 1 Actuator module only)	1
GPC65329A ID Configuration PCB for ACI (for more than 1 Actuator module)	1
GCN0794 Connector Crimp Contacts for 0.25 – 0.5mm ² wire	4
GCN0793 Connector Crimp Contacts for 1.5 – 2.5 mm ² wire	4 or 8

DX



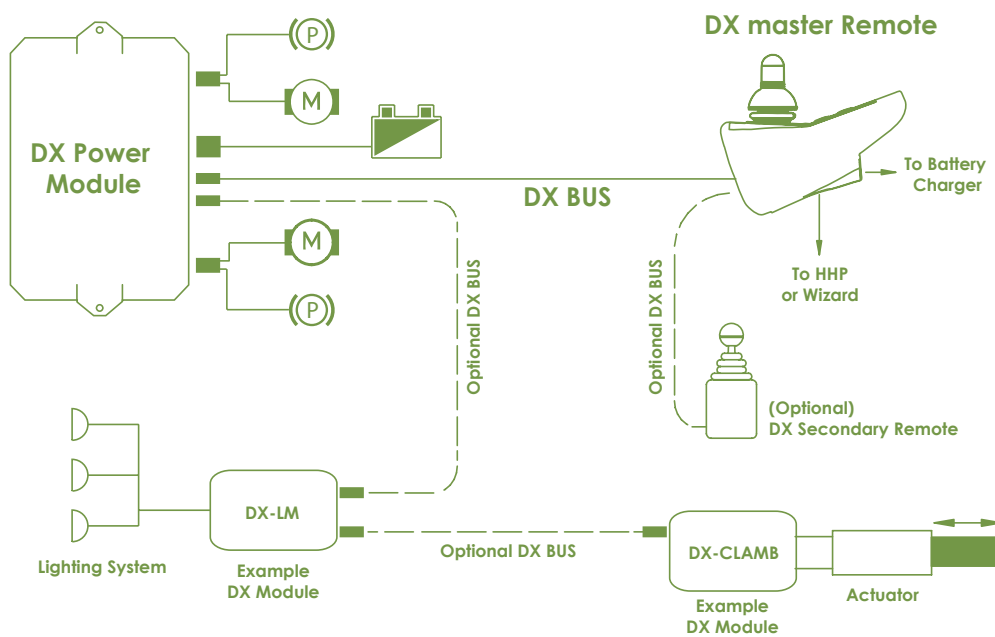
DX™

WHEELCHAIR CONTROL
SOLUTION

THE DX SYSTEM

The DX system is a proven and reliable power chair control system that meets a wide range of user's needs and applications.

- Modular expandable design
- High performance drive control
- Wide range of input and control devices
- Simple connectivity of modules using DX BUS cable
- Easy system configuration and programming using Dynamic Controls Wizard or Hand Held Programmer



Master Remotes

DX-REMG90
DX-REMG91
DX-REMG91S
DX-REM34B
DX-REM41D
DX-REM32B
DX-REM35B
DX-ACU3B

Power Modules

DX-PMB
DX-PMB2
DX-PMB2-S
DX-SLM

Secondary Remotes

DX-ACU1
DX-RJM
DX-RJM-HD
DX-RJM-MINI
DX-RJM-VIC-CCD
DX-ACC4B
DX-SNP

Actuator/Lighting

DX-CLAMB
DX-LM-Z
DX-ARC5
DX-ARCSWB

DX™

Product Tree

Programming

WIZARD
DX-HHP

Environmental Control

DX-ECU

Other

DX-ACC3
DX-SKT-X4

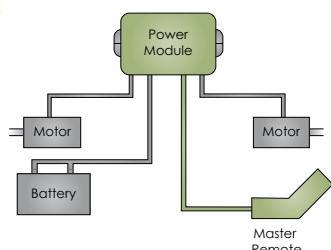
DX MASTER REMOTES

The master remote is the “brains” of the DX system and every DX power chair must have one. Every master remote has an On/Off switch, a programming socket and a DX status indicator. They may also be used to control seat positioning, lighting, and environment controls.

DX-REMG90



DX-REMG90A



High-end joystick remote easily operated by a wide variety of users.

- 5 different drive profiles
- 7 segment LED display and battery gauge
- Proportional, 4-quadrant or 3-quadrant control
- Access to actuator and environmental controls
- Supports latched actuator and simultaneous actuator operation
- Optional jack sockets or toggle switches for on/off and mode control

Part numbers

DX-REMG90	Master Remote
DX-REMG90A	Master Remote with jack sockets
DX-REMG90T	Master Remote with toggle switches

Technical Specifications

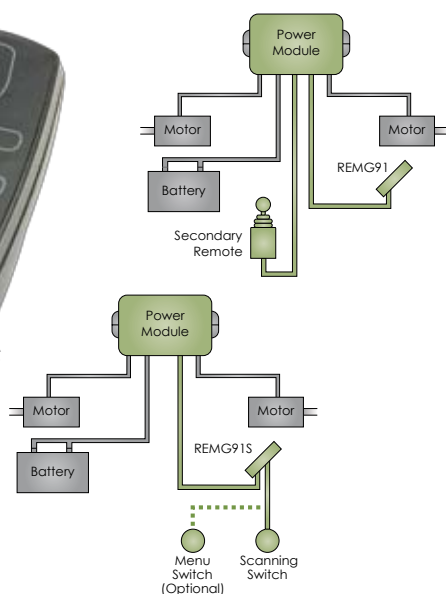
Material	Die-cast aluminium
Protection rating	IPX4
Operating Temp	-25°C to 50°C
Storage Temp	-40°C to 65°C

Size	143 x 71 x 169 mm
Weight	620 grams
DX Connectors	2 DX BUS Connectors

DX-REMG91 Display/DX-REMG91S Scanner Display



DX-REMG91/G91S



High-end display remote ideal for specialty control inputs.

- 5 different easily selectable drive profiles
- 7 segment LED display and battery gauge
- Support for proportional joysticks or switched inputs with 3 or 4 quadrant control
- Access to actuator and environmental controls
- Latched actuator operation
- Three jack sockets or toggle switches for on/off and mode control
- Single switch control through scanning mode (G91S)

Part numbers

DX-REMG91	Display Master Remote
DX-REMG91S	Display Master Remote with scanner
DX-GNK-KIT2	Gooseneck Mounting Kit for DX-REMG91 and DX-REMG91S

Technical Specifications

Material	Plastic
Protection rating	IPX4
Operating Temp	-25 to 50°C
Storage Temp	-40 to 65°C

Size	125 x 85 x 32 mm
Weight	275 grams
DX Connectors	1 DX BUS Connector

DX-REM34B Master Remote



DX-REM34B

A simple joystick remote that can be easily operated by a wide variety of users.

- 5 different drive profiles
- 12 button keypad with icon based buttons
- Dedicated buttons for actuator selection and lighting (requires relevant DX modules)
- 7 segment LED display
- Horn, battery gauge and magnetic key lock

Part numbers

DX-REM34B	Master Remote
	also required – DX BUS cable

Technical Specifications

Material	Plastic
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	85 x 185 x 150 mm
Weight	590 grams
DX Connectors	2 DX BUS Connectors

DX-REM41D Master Remote



DX-REM41D

Joystick controlled remote suitable for tray mounting.

- 5 different drive profiles
- 12 button keypad with icon based buttons
- Dedicated buttons for actuator selection and lighting (requires relevant DX modules)
- 7 segment LED display
- Horn, battery gauge and magnetic key lock

Part numbers

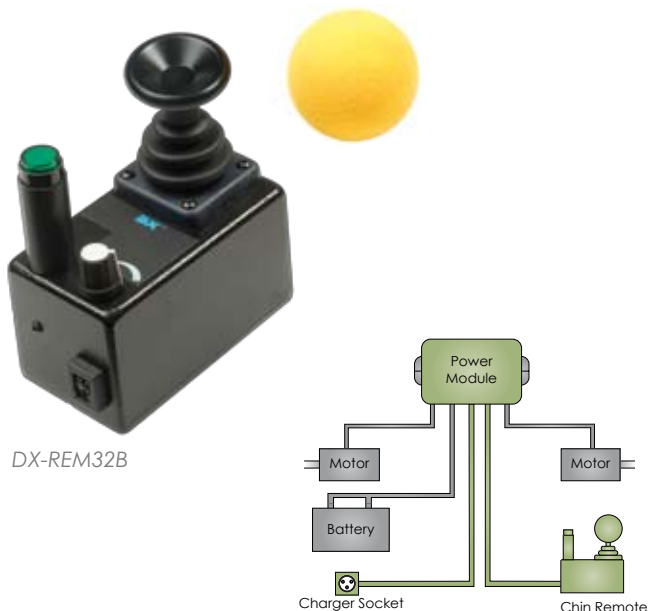
DX-REM41D	Tray Master Remote
	also required – DX BUS cable

Technical Specifications

Material	Black powder-coated aluminium
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	157 x 82 x 120 mm
Weight	575 grams
DX Connectors	1 DX BUS Connector

DX-REM32B Chin Remote



Easy to use joystick controlled master remote that can be operated by a user's chin.

- Optimised for chin operation
- Supplied with soft foam ball and chin cup
- Speed control for adjustment of maximum speed

Part numbers

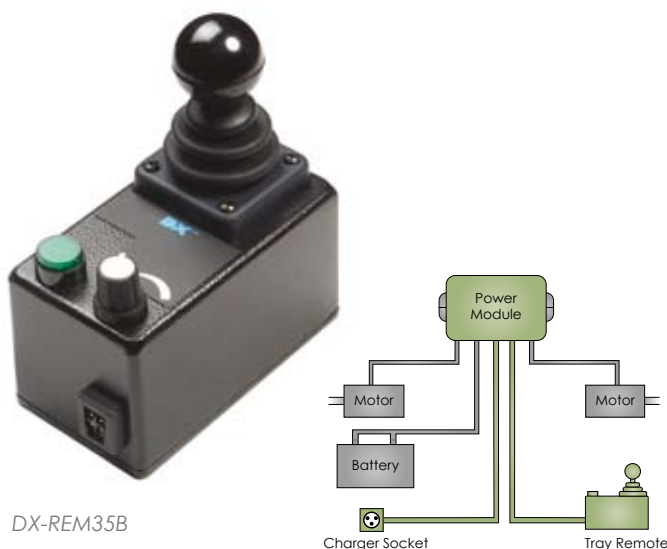
DX-REM32	Chin Remote
	also required – DX BUS cable
	– Charger Socket Module DX-ACC3

Technical Specifications

Material	Black powder-coated aluminium
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	64 x 123 x 135 mm (including joystick)
Weight	700grams
DX Connectors	2 DX BUS Sockets

DX-REM35B Tray Remote



Joystick remote ideal for simple drive-only control.

- Suitable for mounting or use on a tray
- Speed control for adjustment of maximum speed

Part numbers

DX-REM35	Tray Remote
	also required – DX BUS cable
	– Charger Socket Module DX-ACC3

Technical Specifications

Material	Black powder-coated aluminium
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	64 x 123 x 135 mm (including joystick)
Weight	540 grams
DX Connectors	2 DX BUS Sockets

DX-ACU3B Master Attendant Remote



DX-ACU3B

A joystick remote that can be operated by an attendant or carer.

- 5 different drive profiles
- 7 segment LED display
- Icon-based buttons, battery gauge and magnetic key lock
- Push bar or hand grip mounting
- On/Off button, battery gauge, and charger socket easily reached by the attendant

Part numbers

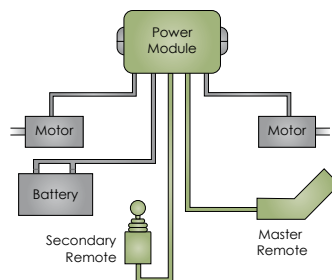
DX-ACU3B	Master Attendant Control
	also required – DX BUS cable

Technical Specifications

Material	Black powder-coated aluminium	Size	100 x 130 x 115 mm (including joystick)
Operating Temp	-25 to 50°C	Weight	512 grams
Storage Temp	-25 to 70°C	DX Connectors	2 DX BUS Sockets

DX SECONDARY REMOTES

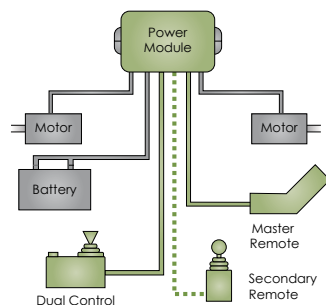
In addition to a Master Remote any DX system can also have a Secondary Remote installed. This enables the user to have a wider choice of input or specialised rehab controls.



DX-ACU1 Attendant Dual Control



DX-ACU1



Joystick remote that enables an attendant to drive the chair instead of the user.

The attendant dual control unit may be used in addition to a secondary remote and master remote all on the same system.

- Switchable control between Attendant and User
- Independent speed control

Part numbers

DX-ACU1	Attendant Dual Control
	also required – DX BUS cable

Technical Specifications

Material	Black powder-coated aluminium
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	90 x 62 x 120 mm
Weight	348 grams
DX Connectors	1 DX BUS Socket

DX-RJM Remote Joystick Module



DX-RJM

Standard proportional joystick for mounting in a range of positions, e.g. chin control, mid line.

Part numbers

DX-RJM	Remote Joystick Module
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Technical Specifications

Material	Black powder-coated aluminium
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	48 x 48 x 135 mm
Weight	375 grams
DX Connector	1 DX BUS plug on a 1.7m cable

DX-RJM-HD Heavy Duty Joystick



DX-RJM-HD

Heavy duty switched joystick remote for users who might damage a standard joystick through rough handling.

- Designed for robustness using heavy duty switches
- 8 driving directions

Part numbers

DX-RJM-HD	Heavy Duty Switch Joystick
	also required – DX BUS cable

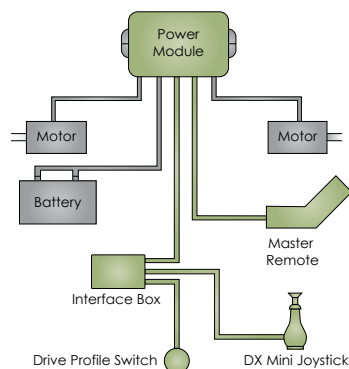
Technical Specifications

Material	Black powder-coated aluminium
Size	110 x 85 x 110 mm (including joystick)
Weight	400 grams
DX Connector	1 DX BUS Socket

DX-RJM-MINI Mini Joystick



DX-RJM-MINI



Very low force proportional joystick secondary remote offering comparable performance to a conventional joystick.

- Sealed unit, suitable for tongue, finger, thumb, hand, chin control
- Light touch, low deflection operation (<10 grams)
- Fully proportional control
- Ergonomic shape ideal for thumb control
- Fully sealed unit

Part numbers

DX-RJM-MINI	Mini Joystick
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Includes a mounting kit, alternative cork ball knob and interface box for connection to the power module.

Requires switch for drive profile.

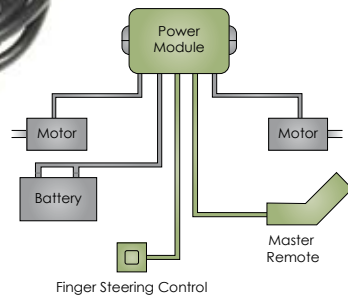
Technical Specifications

Material	Black plastic
Size	65 x 25mm dia
Weight	300 grams
DX Connector	1 DX BUS plug on a 2m cable

DX-RJM-VIC-CCD Finger Steering Control



DX-RJM-VIC-CCD



Non contact proportional finger control for use by users with limited finger strength.

- Designed for finger control with zero force required
- Full proportional control with no physical contact
- Any angle mounting

Please note additional protection is required if driving outdoors in wet conditions.

Part numbers

DX-RJM-VIC-CCD Finger Steering Control

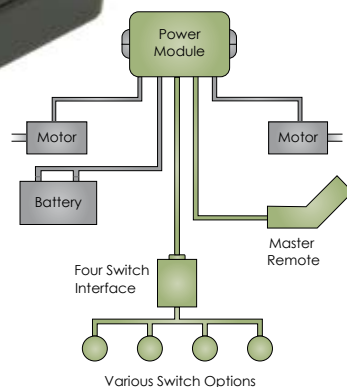
Technical Specifications

Material	Plastic
Size	75 x 75 x 34mm
Weight	375 grams
DX Connector	1 DX BUS Socket on a 1m lead

DX-ACC4B Switch Interface



DX-ACC4B



Input module for up to 5 switches.

- 9 pin D-type connector
- Ideal for use with 3-quadrant and 4-quadrant switched head controls
- Simple driving interface with up to 8 driving directions
- Provides power to active switch controls

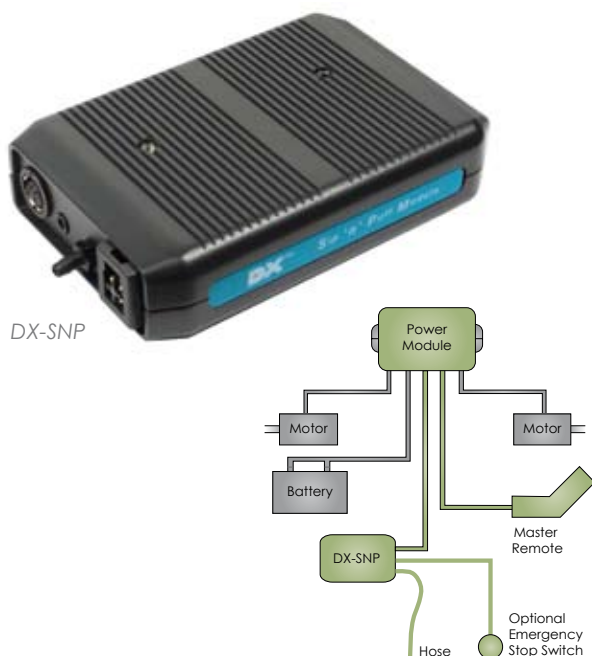
Part numbers

DX-ACC4B Switch Interface
also required – DX BUS cable, switches

Technical Specifications

Material	Plastic
Size	90 x 55 x 25 mm
Weight	120 grams
DX Connector	1 DX BUS Socket

DX-SNP Sip and Puff Interface



Sip and Puff control that can be fine tuned to suit any user or application.

- Fully programmable sip and puff pressures
- 7 standard drive programs
- Latched driving (step or progressive step) with optimised safety through programmable emergency stop and latched time options
- Easy custom programming using DX Hand Held Programmer
- Optimum safety through programmable Emergency Stop and Latch Time options
- Mode Control feature

Part numbers

DX-SNP	Sip and Puff Module
	also required – DX BUS cable
GSM9977	Sip and Puff Mounting Kit
GSM9942	SNP Filter
SW932662	Set of 10 straws
SWTA5100	SNP breath operated mode switch

Technical Specifications

Material	Grey aluminium
Hose size	3.5 mm (1/8") ID
Size	125 x 85 x 30 mm

Weight	320 grams
DX Connector	1 DX BUS Socket

GSM9977 Sip & Puff Mounting Kit



A complete set of parts required to operate the Sip and Puff module.

Contains:

- 21 inch gooseneck
- Air Tube Straws x 2
- Tubing x 1m
- Wheelchair clamp
- Saliva trap

Part numbers

GSM9977	Sip and Puff Mounting Kit
---------	---------------------------

DX POWER MODULES

The DX power modules provide excellent response and driving control in all terrain and are available to suit all mid, rear and front wheel drive configurations.

DX-PMB/PMB2/PMB2-S



DX-PMB

- 60A or 80A dual channel or 160A single channel
- Dynamic Controls load compensation algorithm
- Fully programmable to suit all DC motor power chairs
- Advanced safety and protection features
- Compact, rugged enclosure sealed against dust and water
- 2 DX BUS connectors for easy system expansion
- Visible "flash code" diagnostics

Part numbers

DX-PMB	DX Power Module (60A per channel)
DX-PMB2	DX Heavy Duty Power Module (80A per channel)
DX-PMB2-S	DX Servo Power Module (160A Single Channel)
also required – DXLOOM-PM Connector Kit	

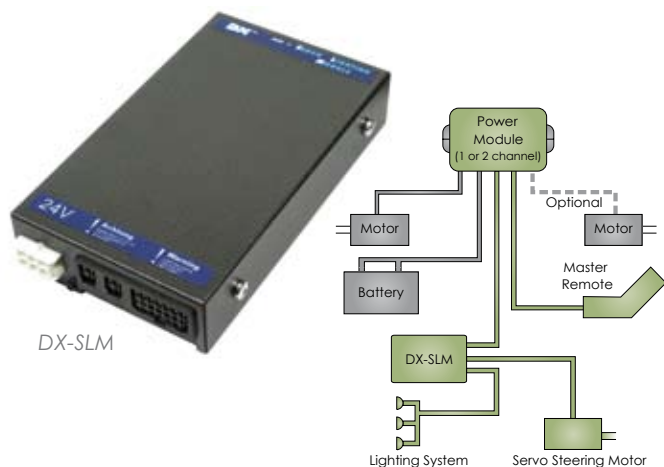
Connector Kits

DXLOOM-PM	DX Connector Kit
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Technical Specifications

Compatible motors	24 volt DC, Permanent magnet	Storage Temp	-25 to 70°C
Compatible park brakes	12 or 24 volt DC	Size	185 x 125 x 45 mm
Material	Aluminium	Weight	1.4 kilograms
Protection rating	IP54	DX Connectors	2 DX BUS Sockets
Operating Temp	-25 to 50°C		

DX-SLM Servo Lighting Module



DX-SLM

Servo steering module for use on wheelchairs that have a separate motor for servo control of steering castors.

- Control of steering servo with potentiometer steering feedback
- Provision of lighting outputs
- Range of programming options to give optimum performance on any servo steered wheelchair

Part numbers

DX-SLM	Servo Lighting Module
also required – DX BUS cable, DXLOOM-SLM, DXLOOM-PM Connector Kit, DX-PMB2 or DX-PMB2-S	

Technical Specifications

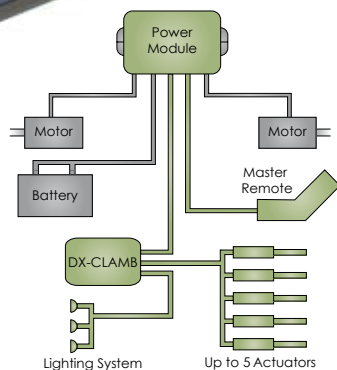
Compatible motor	24 Volt DC, Permanent magnet	Operating Temp	-25 to 50°C
Servo motor current	30A (peak), 5A (continuous)	Storage Temp	-25 to 70°C
Material	Black powder coated aluminium	Size	210 x 123 x 38 mm
Protection rating	IP54	Weight	530 grams
		DX Connectors	2 DX BUS Sockets

DX LIGHTING AND ACTUATOR MODULES

DX-CLAMB Combined Lighting and Actuator Module



DX-CLAMB



Single module providing both lighting and seat actuator functions from a single module.

- Actuator control of up to five separate seat actuators
- Independent current level trips for each actuator
- 3 channel lighting support for indicators, hazard lights, driving lights
- No direct battery connections required, all power sourced via the DX BUS
- External switch inputs can be programmed to slow or stop chair driving if activated

Part numbers

DX-CLAMB	Combined Lighting and Actuator Module
	also required – DX BUS cable, DXLOOM-AUX Connector Kit

Technical Specifications

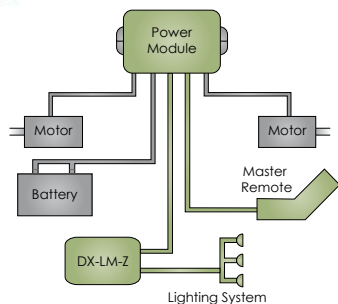
Material	Grey aluminium
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C
Actuator Current Limit	3 – 12A (programmable)

Continuous lighting current	1A (each indicator) 2A (driving light)
Size	85 x 125 x 30 mm
Weight	410 grams
DX Connectors	2 DX BUS Sockets

DX-LM-Z Lighting Module



DX-LM-Z



Provides all of a wheelchair's lighting requirements.

- 3 channel lighting support for indicators, hazard lights, driving lights
- No direct battery connections, all power sourced via the DX BUS
- Short and open circuit detection for lamps

Part numbers

DX-LM-Z	Lighting Module
	also required – DX BUS cable, DXLOOM-AUX Connector Kit

Technical Specifications

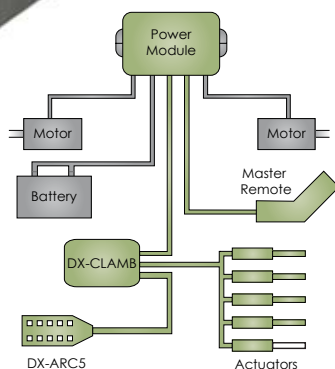
Material	Grey aluminium
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Continuous lighting current	1A (indicators) 2A (driving lights)
Size	125 x 85 x 29 mm
Weight	400 grams
DX Connectors	2 DX BUS Sockets

DX-ARC5 Actuator Remote Control



DX-ARC5



Separate hand-held remote control for actuators.

- Simple operation
- Controls up to 5 actuators
- Can be used with DX or DX2 actuator modules
- Programmable options to allow seat position to be adjusted while driving

Part numbers

DX-ARC5 Actuator Remote Control Module

Please note an actuator module is also required.

Technical Specifications

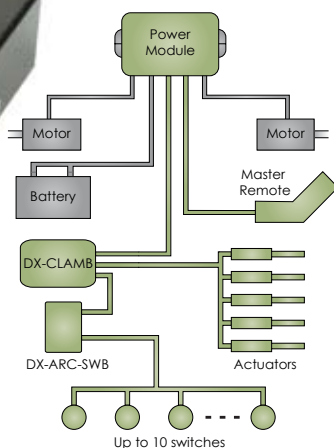
Material Plastic
Protection rating IPX4
Operating Temp -25 to 50°C
Storage Temp -25 to 70°C

Size 61 x 135 x 24.5 mm
Weight 150 grams
DX Connector 1 DX BUS plug on a 2m cable

DX-ARC-SWB Actuator Remote Control Switchbox



DX-ARC-SWB



Control of up to 5 seat positioning actuators using switches connected to a 15 pin D-type connector.

- Alternative for users who have difficulty using actuator controls
- Remote control for actuators using a choice of external switches (customer supplied)
- Simple operation
- Can be used with DX or DX2 actuator modules
- Switched 24V, 1A auxiliary power supply output

Please note that this unit cannot be used at the same time as a DX-ARC5.

Part numbers

DX-ARC-SWB Actuator Remote Control Switchbox

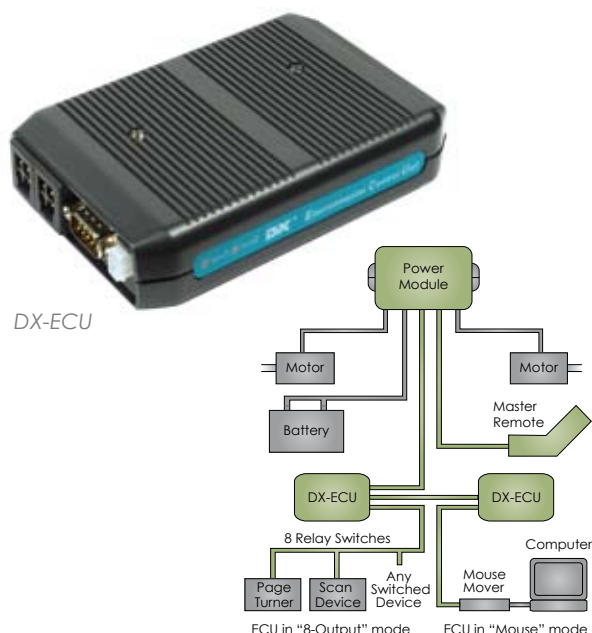
Technical Specifications

Material Black powder coated aluminium
Operating Temp -25 to 50°C
Storage Temp -25 to 65°C
Size 95 x 61 x 26 mm

Weight 100 grams
DX Connector 2 DX BUS sockets
Auxiliary Output Current 1A

DX ENVIRONMENTAL CONTROLS

DX-ECU Environmental Control Unit



Environmental control of up to 8 switched outputs using the same user input device as used for driving.

- Interface to on-chair devices such as laptop computers or communication aids
- Independent control of up to 8 separate functions or devices per DX-ECU
- "Mouse mode" for operating a computer mouse mover
- Up to 2 ECUs can be operated in a single DX system
- Can be used with DX or DX2 master remotes that support ECU

Part numbers

DX-ECU	Environmental Control Unit
	also required – DX BUS cable

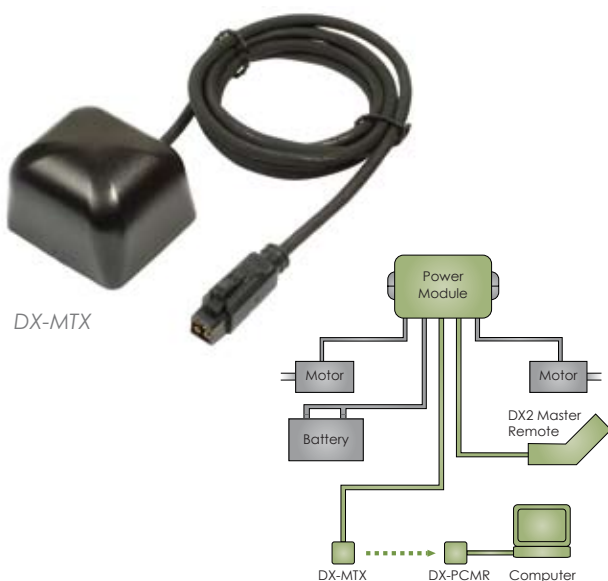
Please note a Master Remote that supports ECU functionality is required.

Technical Specifications

Material	Grey aluminium
Protection rating	IP54
Size	125 x 85 x 29mm

Weight	400 grams
DX Connector	1 DX BUS Socket

DX-MTX Infra-red Mouse Transmitter



Infra-red mouse transmitter that allows powerchair users to drive a computer mouse directly from their joystick with full proportional control.

- Operates with DX2-REM550/551
- PC mouse control via infra-red (IR) link
- 360 degree transmission reducing precision required to point and activate
- Small and lightweight
- Permanent or temporary mounting

It is used together with the DX-PCMR.

Part numbers

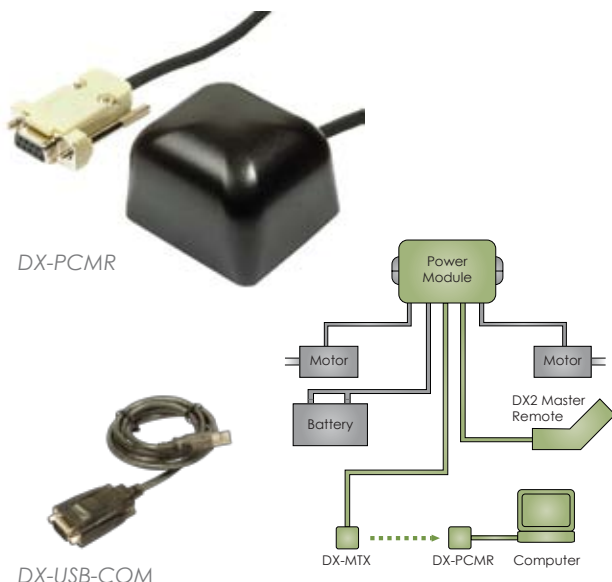
DX-MTX	Infra-Red Mouse Transmitter
	also required – DX-PCMR

Technical Specifications

Material	Plastic
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	55 x 50 x 40 mm
Weight	150 grams
DX Cable length	1.7m

DX-PCMR Infra-red Mouse Receiver



Infra-red mouse receiver that allows powerchair users to drive a computer mouse directly from their joystick with full proportional control.

- Infra-red (IR) receiver
- Serial port or use with USB adapter DX-USB-COM
- Small and lightweight
- No special software required
- PC compatible
- Permanent or temporary mounting

Part numbers

DX-PCMR	Infra-Red Mouse Transmitter
	also required – DX-MTX or DX-IRIS2
	Required for USB – DX-USB-COM

Technical Specifications

Material	Plastic
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	55 x 50 x 40mm
Weight	100 grams
Cable length	1.5m

DX-IRIS2 Infra-red Interface Transmitter System



Allows any device operated by an infra red remote control to be operated from a wheelchair.

- Operates with DX2-REM550/551
- Infra-red (IR) transmitter
- Environmental control via IR
- Learns commands directly from IR remote control
- PC mouse control via IR
- 360 degree transmission reducing precision required to point and activate
- Small and lightweight
- Permanent or temporary mounting

Part numbers

DX-IRIS2	Infra-red Interface System
	also required – DX-PCMR for mouse control

Technical Specifications

Material	Plastic
Protection rating	IP54
Operating Temp	-25 to 50°C
Storage Temp	-25 to 70°C

Size	55 x 50 x 40 mm
Weight	150 grams
DX Cable length	1.7m

DX-ACC3 Charger Socket Module

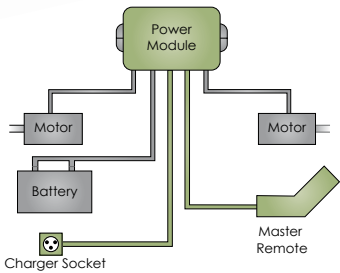


DX-ACC3

Provides separate battery charging socket for 24 Volt Battery Chargers up to a maximum of 8A.

Part numbers

DX-ACC3	Charger Socket Module
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Technical Specifications

Material	Plastic
Size	64 x 44 x 49 mm
Weight	160 grams
DX Connector	1 DX BUS Plug on a 1.5 cable

DX SWITCHES

SWTA5018 Wafer Switch



SWTA5018

A five switch unit built into a low-profile housing.

- Slightly recessed switches that are 60 mm in diameter
- Marked with direction control
- 9 pin D-Type connector

Part numbers

SWTA5018	Wafer Switch
----------	--------------

Technical Specifications

Size	400 x 150 x 13 mm
Force	100 grams

SWTA5024 Penta Switch



SWTA5024

Miniature five way switch.

- For fine motor skills and good targeting ability
- Easily used in the palm of the hand or on a flat surface
- 9 pin D-Type connector

Part numbers

SWTA5024	Penta Switch
----------	--------------

Technical Specifications

Size	13 x 50 mm dia.
Force	120 grams

SWTA5020 Mini Joystick with Push



SWTA5020

Five switch joystick activation(4 directions, push down for the 5th switch).

- Can be easily mounted for hand or chin operation
- 9 pin D-type connector

Part numbers

SWTA5020	Mini Joystick with Push
----------	-------------------------

Technical Specifications

Size	120 x 30 mm
Force	120 grams (200 grams for Push)

SWTA5026 Star Switch



SWTA5026

A five way multiple switch that comes with five coloured dots.

- Slightly recessed switches that are 60 mm in diameter
- 9 pin D-type connector

Part numbers

SWTA5026	Star Switch
----------	-------------

Technical Specifications

Size	230 x 230 x 13 mm
Force	150 grams

Buddy Button



Robust but sensitive single switch that is available in a wide range of colours.
Terminated with a 3.5mm jack plug.

Part numbers

SWTA5710	Buddy Button - Red
SWTA5720	Buddy Button - Green
SWTA5730	Buddy Button - Purple
SWTA5740	Buddy Button - Pink
SWTA5750	Buddy Button - Yellow
SWTA5760	Buddy Button - Blue
For DX-REMG91S monitored against disconnection	
SWTA9993	Buddy Button - Purple (monitored, use with DX-REMG91S)

Technical Specifications

Size	20 x 65 mm dia.
Force	100 - 200 grams

Micro Lever Switch



SWLA70M, SWLA70MG, SWLA70MR

Small switch with low operating force available in a range of colours.
Terminated with a 3.5mm jack plug.

Part numbers

SWLA70M	Micro Lever Switch - Black
SWLA70MR	Micro Lever Switch - Red
SWLA70MB	Micro Lever Switch - Blue
SWLA70MY	Micro Lever Switch - Yellow
SWLA70MG	Micro Lever Switch - Green

Technical Specifications

Size	40 x 36 x 20 mm
Force	100 grams

Mini Cup Switch

Very small switch for people with good targeting ability.



SWTA5808

Part numbers

SWTA5808

Mini Cup Switch

Technical Specifications

Size	25mm diameter, 9mm high
Force	130grams

GSM9976 5 to 1 Switch Adaptor



GSM9976

This adaptor allows four or five single switches to be used in place of a multiple switch.

- 9 pin D-type connector (TASH compatible wiring)
- Plugs into DX switch interface modules
- Ideal assessment aid to select locations of single switches

Part number

GSM9976

5 to 1 Switch Adaptor

Technical Specifications

Length	150 mm
Weight	54 grams

DX CABLES AND CONNECTORS

DX BUS Cables



GSM63051

DX and DX2 modules connect using small, flexible, 4 wire DX BUS cables.

- Available in various lengths and types to support a variety of mounting options

Part numbers

Straight Cables

GSM63003	DX BUS cable 0.3m
GSM63005	DX BUS cable 0.5m
GSM63010	DX BUS cable 1.0m
GSM63015	DX BUS cable 1.5m
GSM63020	DX BUS cable 2.0m
GSM63025	DX BUS cable 2.5m

Curly Cables

GSM63051	DX BUS curly cable 0.8m (compressed)
GSM63052	DX BUS curly cable 1.1m (compressed)

Extension Cables

GSM65433	DX BUS male-female extension cable 0.3m
GSM63081	DX BUS male-female extension cable 1.0m

DX-SKT-X4 DX BUS 4 Way Socket



DX-SKT-X4

Provide additional DX BUS sockets to attach extra DX modules.

Part numbers

DX-SKT-X4	DX BUS 4 Way Socket
	also required DX BUS cables

Technical Specifications

Size	23 x 93 x 22 mm
Weight	53 grams
DX Connectors	4 DX BUS Sockets

GME64909 DX BUS Connector Cover



GME64909

The DX BUS connector protects unused DX BUS sockets against contamination or accidental short circuit.

Part numbers

GME64909	DX BUS Connector Cover
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Technical Specifications

Size	16.5 x 12.5 x 10.3 mm
Colour	Black

DX Connector Kits

DX connectors are available in kit form or as pre-assembled looms.

- DX Power module connector kits include all connectors for the motors and batteries
- Some are compatible with DX2 Power Modules as noted below

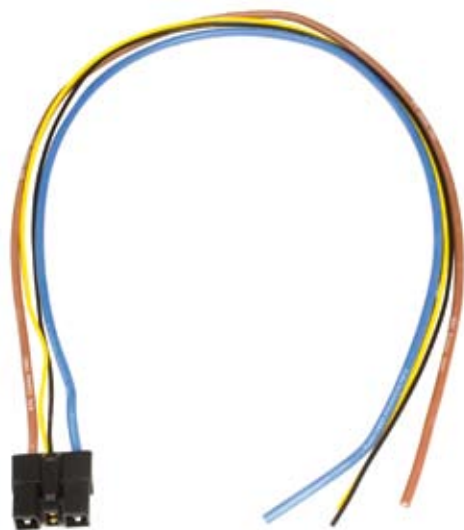
Please note if ordered separately 2 Motor Connector Kits and 1 Battery Connector Kit are required for each Power Module.



DXLOOM-PM

Part numbers		# per Power Module
DXLOOM-PM	DX Power Module Connector Kit	1
or		
GSM60180	DX Battery Connector Kit	1
GSM60182	DX/DX2 Motor Connector Kit	2
also		
GCN60325	DX/DX2 Motor Housing – left or right motor	2
GCN60326	DX/DX2 Motor Housing – left motor only	1
GCN60327	DX/DX2 Motor Housing – right motor only	1
GCN0791	DX Battery Housing	1
GCN0787	DX/DX2 Motor Housing Cover	1
GCN0788	DX Battery Housing Cover	1
GCN0781	DX/DX2 Motor/Battery Contact	8
GCN0793	DX/DX2 Park Brake Contact	4

DX Pre-assembled Leads



GSM61192

Separate connector covers are also available for these looms.

- Some are compatible with DX2 Power Modules as noted below

Part numbers		# per Power Module
GSM61190	DX Battery Loom – 450mm	1
GSM61191	DX/DX2 Left Motor Loom – 700mm	1
GSM61192	DX/DX2 Right Motor Loom – 700mm	1
GCM0788	DX Battery Connector Cover	1
GCM0787	DX/DX2 Motor Connector Cover	2

DX Lighting and Seating Module Connectors



DX-LOOM-AUX

Available as kits or individual parts.

Part numbers		# per Module
DXLOOM-AUX	DX Auxiliary Connector Kit	1
or		
GCM0795	DX Auxiliary Connector Cover	1
GCM0796	DX Auxiliary Connector Housing	1
GCM0793	DX Auxiliary Crimp Pin	21

Connector Tools



CRIMP9999

CRIMP9998

Crimping, insertion and extraction tools are available for the pins used in the DX and DX2 connectors. It is recommended they be used for volume production of wiring looms.

Positronic Crimp Tool and Turret

- For circular Positronic pins (GCM0793, GCM0794)
- Used for connecting the park brakes, lights and seat actuators
- Supplied as a separate hand tool and crimp turret

Connector Tools (continued)



CRIMP9996



CRIMP9995



CRIMP9994

Positronic Insertion and Extraction Tool

- For assembly and removal of the Positronic pins

AMP Innergy Tool and Die

- For crimping DX / DX2 motor pins and DX battery connection pins
- Supplied as a separate hand tool and crimp die

Part numbers

CRIMP9999	Positronic Crimp Tool
CRIMP9998	Positronic Crimp Turret
CRIMP9997	Positronic Insertion Tool
CRIMP9996	Positronic Extraction Tool
CRIMP9995	AMP Innergy Crimp Tool
CRIMP9994	AMP Innergy Crimp Die

DX TEST EQUIPMENT

DX-BCT DX BUS Cable Tester



DX-BCT

Simple pass or fail tester for all DX BUS cables.

- Test for short circuits or open circuits

Part numbers

DX-BCT	DX BUS Cable Tester
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Technical Specifications

Size	80 x 150 x 55 mm
Weight	225 grams

DX Connectors	2 DX BUS Sockets
2 AA batteries are included.	

DX-CMT DX CLAM Tester



DX-CMT

Tests all functions of the Combined Lighting and Actuator Module (DX-CLAMB).

- Plugs into the Combined Lighting and Actuator Module in place of the wheelchair's lights and seat actuators
- No batteries are required

Part numbers

DX-CMT	Tester
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Technical Specifications

Size	81 x 145 x 42 mm
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Weight	189 grams
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DX-ACC4T Switch Tester



DX-ACC4T

Ideal for selecting the best multiple switch for an individual to use and testing that multiple switches are operating correctly.

Part numbers

DX-ACC4T	Switch Tester
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9V battery included.

Technical Specifications

Size	65 x 104 x 40 mm
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Weight	100 grams
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SHARK



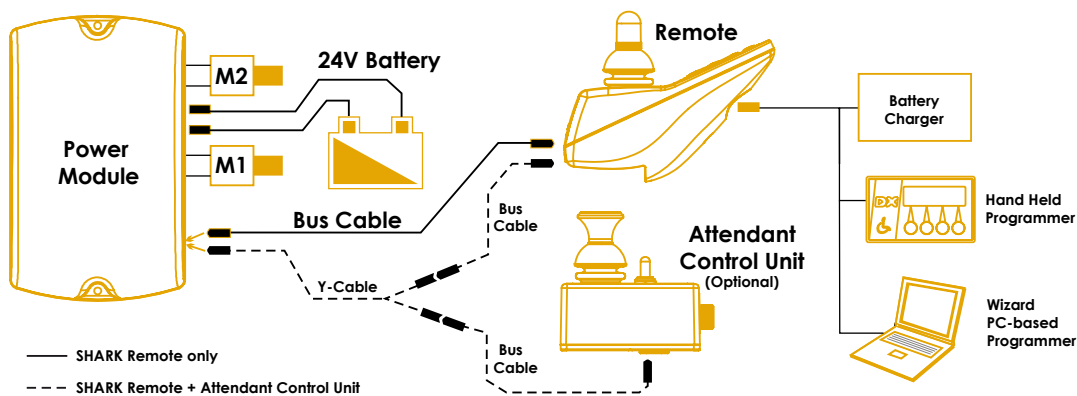
WHEELCHAIR CONTROL
SOLUTION

THE SHARK SYSTEM

The SHARK System is a versatile and cost-effective Powerchair control solution designed to fit the majority of standard power chair applications.

Key Features:

- Excellent drive performance and efficiency using separate power and remote modules
- Two optional seat actuators driven directly from the power module
- Optional full lighting support
- Optional attendant control of drive and seat functions
- Simple product configuration using the Hand Held Programmer (DX-HHP) or the Wizard PC program
- Variety of cable options
- Programmable inhibit and speed control functions via the flexible multi-function DCI pins
- Dynamic Controls quality and reliability



SHARK Selection Guide

Select from multiple Power and Remote Module options to create a system suitable for drive only, drive + actuator, drive + lights or drive + actuators + lights. Select either the robust 60A Power Module or the 75A with boost for curb-climbing, hill starting and turning on thick carpets.

	Drive Only	Drive + Actuators	Drive + Lights	Drive + Actuators + Lights
Remote	DK-REMD01	DK-REMD11	DK-REMD31	DK-REMD21
Power Module	DK-PMB40 (40A) or DK-PMB50 (50A) DK-PMB60 (60A) DK-PMB01 (75A) DK-PMC01 (90A)	DK-PMB11 (60A, 1 Act.) or DK-PMB21 (75A, 2 Act.) DK-PMC21 (90A, 2 Act.)	DK-PMB31 (75A)	DK-PMB21 (75A, 2 Act.)

SHARK REMOTE MODULES

DK-REMD01/11/21/31



DK-REMD21

The DK-REMD is a stylish modern joystick remote that is simple to use and configure.

Key features:

- Dynamic Controls Virtual Speed Pot technology
- Circular speedometer
- Field replaceable Bus cables

Part numbers

DK-REMD01	Basic Remote for drive only
DK-REMD11	Remote for drive only + 2 Actuators
DK-REMD21	Remote for drive only + 2 Actuators + Lights
DK-REMD31	Remote for drive only + Lights

Technical Specifications

Material	Polymer
Protection Rating	IPX4
Operating Temp	-25 to 50°C

Storage Temp	-40 to 65°C
Size	193 x 77 x 119 mm
Weight	400 grams

DK-ACU



DK-ACU

A joystick remote that can be operated by an attendant or carer.

Key features:

- Control of both drive and actuator functions
- Simple user interface via a speed pot and toggle switch

Part numbers

DK-ACU	Attendant Remote
GSM80951	Y cable 150mm/5.9" length

Technical Specifications

Material	Aluminium
Protection Rating	IPX4
Operating Temp	-25 to 50°C

Storage Temp	-40 to 65°C
Size	127 x 64 x 114 mm (including joystick)
Weight	305 grams

SHARK POWER MODULES

DK-PMB40/50/60



Basic drive only power module.

Key features:

- 40A or 50A, or 60A power module
- Three fully programmable drive profiles that simplifies dealer programming
- Flexible programming options for all chair configurations

Part numbers

DK-PMB40	Basic 40A Power Module for drive only
DK-PMB50	Basic 50A Power Module for drive only
DK-PMB60	Basic 60A Power Module for drive only

DK-PMB01/11/21/31



The DK-PMB x1 builds on the successful DK-PMB60 by adding programmable boost features and optional actuators and lighting.

Key features:

- Programmable 15A boost current to provide extra power when needed (75A)
- Optional 1 or 2 built in actuators
- Optional built in lighting

Part numbers

DK-PMB01	Basic 60A + 15A boost Power Module for drive only
DK-PMB11	60A + 15A boost Power Module for drive only + 1 Actuator
DK-PMB 21	60A + 15A boost Power Module for drive only + 2 Actuators + Lights
DK-PMB 31	60A + 15A boost Power Module for drive only + Lights

DK-PMC01/21



The DK-PMC builds on the successful DK-PMB01 by adding programmable boost features and optional actuators and lighting.

Key features:

- Programmable 75A boost current to provide extra power when needed (90A)
- Optional 1 or 2 built in actuators
- Optional built in lighting

Part numbers

DK-PMC01	Basic 75A + 15A boost Power Module for drive only
DK-PMC 21	75A + 15A boost Power Module for drive only + 2 Actuators + Lights

Technical Specifications

Material	Die cast, powder coated
Protection rating	IPX4
Operating Temp	-25 to 50°C

Storage Temp	-40 to 65°C
Size	181 x 111 x 48 mm
Weight	960 grams

SHARK CABLES

Shark BUS Cable



GSM80234

One cable is required to connect remote module to power module. Available in a variety of lengths.

Part numbers

GSM80241	2.5m/8'2"
GSM80242	2.0m/6'6"
GSM80233	1.5m/4'11"
GSM80234	1.0m/3'3"
GSM80236	0.5m/1'7.7"

Shark BUS Extension Cable



GSM80231

May be used to extend standard bus cable if required.

Part numbers

GSM80203	300mm/1ft
GSM80220	300mm/1ft (with panel mounting spring)
GSM80211	640mm/2'1"
GSM80221	640mm/2'1" (with panel mounting spring)
GSM80231	0.9m/2'11"
GSM80224	0.9m/2'11" (with panel mounting spring)
GSM80232	1.2m/3'11"

Motor/Park Brake Leads



GSM61191

Part numbers

GSM61191	700mm/2'3.5" Motor 1
GSM61191P	700mm/2'3.5" Motor 1 (Keyed/Polarized)
GSM61192	700mm/2'3.5" Motor 2
GSM61192P	700mm/2'3.5" Motor 2 (Keyed/Polarized)

Battery Leads



GSM80204

Part numbers

GSM80204	0.5m/ 1'7.7"
GSM80213	1.0m/3'3"

SHARK CONNECTORS

Battery & Motor Kits



GSM60182

Battery and Motor connectors are sold as kits. Each kit includes housings, connector boots and all required pins.

Part numbers

GSM80210	Unkeyed motor + Battery Connector Set
GSM80209	Keyed motor + Battery Connector Set
GSM80208	Battery Connector Set
GCN60325	Single Motor Connector Kit-unkeyed (use when ordering one-off)
GCN60326	Single Motor Connector Kit – Left keyed
GCN60327	Single Motor Connector Kit – Right keyed
GCN60323	Connector Key to configure GCN60325 for left or right

Note: DX2 battery and motor connectors can also be used with Shark. See page 14.

DCI Port 4 Way



GSM80206

DCI connectors sold as a complete kit (including housing and pins) or as individual housings and pins.

Part numbers

GSM80206	4 Pin Kit (inc housing and 4 pins)
GCN8005	Individual Connector Housing (AMP Mate Nlok2 Mini 4W Hse #794188-1)
GCN0978	Individual pins 16-20 AWG (AMP Mate Nlok2 Mini receptacle #794223-1)

DCI Port 12 Way



GSM80226

DCI connectors sold as a complete kit (including housing and pins) or as individual housings and pins.

Part numbers

GSM80226	12 Pin Kit (includes housing and 12 pins)
GCN8004	Individual Connector Housing (AMP Mate Nlok2 Mini 12W Hse #172170-1)
GCN0691	Individual pins 16-20 AWG (AMP Mate Nlok2 Mini receptacle #794231)

A-SERIES



A-series
Performance without compromise

INTEGRAL WHEELCHAIR CONTROLLER

A-SERIES INTEGRAL WHEELCHAIR CONTROLLER



The A-series is a high quality yet cost effective 50A integrated controller for power wheelchairs. It offers class leading drive performance and is ideal for lightweight or folding chairs and drive only applications.

Key features:

- Easy to use joystick control with large buttons and clear icons
- Zero rollback on slopes
- Stability control technology provides excellent driving for all chair types
- "Virtual Speed Pot" for proportional speed selection
- A choice of industry standard connectors
- Enhanced maintenance functions

Part numbers

DA50-A41	A-Series 50A, 1030mm loom, Anderson Connectors
DA50-B41	A-Series 50A, 1030mm loom, Beau Connectors
DA50-C41	A series 50A, 1030mm loom, DK Connectors
DA50-C51	A series 50A, 1300mm loom, DK Connectors

A-Series Connector Types



Technical Specifications

Material	Polymer Top, Aluminum Bottom Case
Protection rating	IPX4
Operating Temp	-25 to 50°C

Storage Temp	-40 to 70°C
Size	194 x 153 x 79 mm
Weight	1.25Kg / 2.75 lbs

R-SERIES



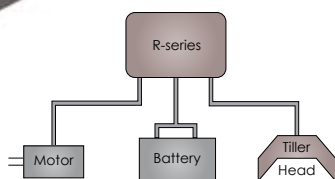
rseries
A refined control solution

SCOOTER CONTROLLER

R-SERIES SCOOTER CONTROLLERS



DR50-A01



DR90-A01

The R-Series is a high quality, value for money scooter controller that will provide a refined drive experience, available in 50A and 90A versions.

Key features:

- Advanced kerb climbing and hill starting capabilities
- Greater safety through improved stability and control when turning
- Programmable acceleration curves, zero roll back on slopes
- Industry standard connections and mounting
- Two drive profiles
- Brake and reverse lights
- Advanced diagnostics and smart servicing indicator

Part numbers

DR50-A01	R-Series 50A Scooter Controller
DR90-A01	R-Series 90A Scooter Controller

Technical Specifications

Material	Die-cast aluminum base, plastic cover (UL94 V-O rating)
Protection rating	IPX5

Operating Temp	-25 to 50°C
Size	131.5 x 72.5 x 40 mm
Weight	260 grams

R-SERIES CONNECTORS



DR-CONSETA

Complete set of all connectors required to install R-Series controllers.

Part numbers

DR-CONSETA	R-Series Connector Kit
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RHINO

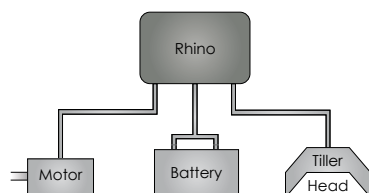


SCOOTER CONTROLLER

RHINO SCOOTER CONTROLLERS



DS72K01



The Rhino controller is a robust, high quality scooter controller that may also be used for other applications requiring precise motor control in forward and reverse directions.

Rhino controllers are available in 70A, 110A and 160A variants to meet the requirements of all types of scooter.

Key features:

- Smooth power delivery
- Automatic speed adjustment to compensate for changes in driving surfaces
- Choice of controls – single ended throttle or wig wag
- Designed for safety
- High level of environmental protection
- Enhanced system protection including motor and batteries
- Fully programmable drive profiles

Part numbers

DS72K01	Rhino 70A Controller
DS72KB02	Rhino 70A Controller with lights
DS72KA04	Rhino 70A Controller with seat lift
DS112K01	Rhino 110A Controller
DS112KB02	Rhino 110A Controller with lights
DS162KD01	Rhino 160A Controller with lights or reverse beeper

Technical Specifications

Material	Die-cast aluminum with plastic cover
Protection rating	IPx4
Operating Temp	-25 to 60°C

Size	155mm x 100mm x 45mm
Weight	650 grams

Rhino Connectors



DSLOOM-72K

Complete set of all connectors required to install a Rhino controller.

Part numbers

DSLOOM-72K	Rhino Connector Kit (70A controller)
DSLOOM-112K	Rhino Connector Kit (110A controller)
DSLOOM-162K	Rhino Connector Kit (160A controller)

PROGRAMMING

The image features a dark blue background with the word "PROGRAMMING" in large, white, sans-serif capital letters. Two thin white lines originate from the right side of the text and extend diagonally downwards towards the left, crossing the white background area.

PROGRAMMING

Dynamic Controls provides two programming tools for configuring products:

- Hand Held Programmers (HHP) - a convenient hand held device.
- Wizard – PC Programming tool

HAND HELD PROGRAMMERS

The Hand Held Programmers (HHP) allow wheelchair and scooter manufacturers, dealers and health professionals to adjust the system settings to suit a particular wheelchair, scooter or individual.

Key features:

- Access to the most commonly changed settings
- 4 line full text display
- Easy to understand fault conditions

DX-HHP (for all products except Rhino)



DX-HHP

HHP are sold as a complete kit that includes all the required adaptors. It is compatible with DX2, DX, Shark, A- series and R-series.

Part numbers

DX-HHP	Hand Held Programmer for all products except Rhino
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Rhino Hand Held Programmer



DS2K-PD

The Rhino HHP is specific for the Rhino product family. No Adaptors required.

Part numbers

DS2K-PD	Dealer Hand Held Programmer for Rhino
DS2K-PI	OEM (Manufacturer) Hand Held Programmer for Rhino

WIZARD PC PROGRAMMING TOOL



DWIZ-KIT

Wizard is a software programming tool designed to program, configure and diagnose all products from Dynamic Controls. It is intended for manufacturers, dealers and therapists.

Key features:

- Operates under Microsoft Windows
- Supports all Dynamic Controls' products
- Simple to use

Part numbers

DWIZ-KIT	Wizard program on CD plus all cables & adaptors
----------	---

Dongles



DWD-OEM-U

A dongle is a hardware security device that plugs into your computer to prevent unauthorised access to product parameters. Product safety and integrity are protected by the dongle. Using the correct dongle level ensures Wizard operators only have access to functions they are trained to use.

Part numbers

DWD-DLR-U	Dealer – Allows customisation to specific users
DWD-EDL-U	Enhanced Dealer – Dealer access plus ability to edit auxiliary function options
DWD-OEM-U	OEM – access to all parameters required by a manufacturer
DWD-FAC-U	Factory – prevents unauthorised changes in a production environment

Programming Adaptors and Wizard Kit replacement parts

In the event of loss or accidental damage replacements can be ordered individually.

Part numbers

DWIZ-CABLE	Wizard Communications Cable
DWIZ-ADAPT	Programming adaptor for DX2, A-series, R-series & Shark*
DX-USB-COM	Serial to USB adaptor
DWIZ-S/W	Wizard software on CD
DK-ADAPT	DX-HHP to Shark adaptor
DR-PRGLM02	Used with DWIZ-ADAPT for R-series without a charger socket

*Can be used between Wizard and Shark but not DX-HHP and Shark

MOTORS

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MOTORS



WMT 90102

Dynamic Controls wheelchair motors are specifically designed for wheelchairs and are optimized for high performance and long range. They are ideal for indoor/outdoor chairs and are compatible with any Dynamic control system.

Key features:

- Low noise, maintenance free gearbox
- Built in clutch
- Supplied with connectors pre-fitted
- Ready to mount directly onto a wheelchair frame or flat plate

Part numbers

WMT90482	M3 Motor Set
WMT90483	M3 Motor – left
WMT90484	M3 Motor – right
WMT90496	M3V Motor Set – Vertical Mounting
WMT90497	M3V Motor Left – Vertical Mounting
WMT90498	M3V Motor Right – Vertical Mounting
WMT90102	M4 Motor Set
WMT90103	M4 Motor Set Left
WMT90104	M4 Motor Set Right
WMT90402	M5 Motor Set
WMT90403	M5 Motor – left
WMT90404	M5 Motor – right
WMT90422	M6 Motor Set
WMT90423	M6 Motor – left
WMT90424	M6 Motor – right
WMT90442	M7 Motor Set
WMT90443	M7 Motor left
WMT90444	M7 Motor right
WMT90462	M8 Motor Set
WMT90463	M8 Motor – left
WMT90464	M8 Motor – right

Technical Specifications

Motor Type	Peak Rated Power Consumption (W)	No load Current (A)	Rated Torque (Nm)	Rated Speed (rpm)	Gearbox Ratio	Peak Current	Weight (Kg)
M3	180	3	14.0	115	1/32	40	6.0
M4	230	3.3	Not available	120	1/32	Not available	6.5
M5	320	3	14.2	115	1/32	50	6.9
M6	560	4.5	16.5	166	1/28	65	9.9
M7	680	6	24.4	132	1/32	80	7.9
M8	635	6	15.4	202	1/21	65	12.1

ACCESSORIES

The image features a dark blue header at the top containing the word 'ACCESSORIES' in white. Below the header, two thin, dark blue lines curve upwards from the left side towards the right. The bottom half of the image is a solid dark blue rectangular block.

ACCESSORIES

Charger Plug



3 pin plug for connecting battery chargers to all Dynamic Controls wheelchair and scooter controls.

Part numbers

GCK0309	Charger Plug
---------	--------------

Connections: Pin 1 B+, Battery Positive
Pin 2 B-, Battery Negative
Pin 3 Linked to Pin 2, inside plug

Linking pins 2 and 3 inside the charger plug will stop the wheelchair or scooter from being driven away with the battery charger plugged in.

Circuit Breakers

GCK0011



Part numbers

GCK0011	Circuit Breaker – 40A
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GCK0014	Circuit Breaker – 60A
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Joystick Knobs



Clockwise from top left: Sponge Ball, Golf Ball Knob, Finger Tube, Wrist Plate, Round T-Bar, Straight Bar, Flat T-Plate, Joystick Knob, Joystick Skirt (towards middle), DL Knob, Carrot Knob, Standard Ball Knob (towards centre), Chin Cup.

Alternative fittings to add to any Dynamic Controls joystick to enable customisation for an individual.

Part numbers

GJS0003	Standard Ball Knob (30 mm)
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GJS0031	Carrot Knob
---------	-------------

GJS0040	DL Knob
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GJS26819	Chin Cup (use with GJS0029)
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GJS26826	Sponge Ball (use with GJS0029)
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GJS9983	Golf Ball Knob
---------	----------------

GJS0029	Joystick Metal Insert
---------	-----------------------

GJS0022	Wrist Plate (chrome)
---------	----------------------

GJS0033	Round T-Bar (chrome)
---------	----------------------

GJS0044	Flat T-Plate (chrome)
---------	-----------------------

GJS0055	Straight Bar (chrome)
---------	-----------------------

GJS0066	Finger Tube (chrome)
---------	----------------------

GJS0090	Joystick Knob
---------	---------------

GJS0091	Joystick Skirt
---------	----------------

Magnetic Key



DC-MKEY

For use with Master Remotes that have the magnetic keylock feature.

Part numbers

DC-MKEY	Magnetic Key
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Wheels and Tyres



WHL90002

These aluminium wheels are supplied complete with pneumatic tyres and tubes.

Part numbers

WHL90002	12.5"/31.75cm diameter
WHL90022	12.5"/31.75cm diameter 8 spoke wheel



WHL90022

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Dynamic Controls is the world's leading manufacturer of electronic controls for power wheelchairs and scooters.
DYNAMIC CONTROLS was established in 1972 and is headquartered in New Zealand.
Regional centres are located in Europe, United States, Asia, and Australasia.

ISO 13485 certified – DYNAMIC CONTROLS goes above and beyond industry standard expectations to ensure customers receive the best products possible.

Actual products may vary from those featured due to DYNAMIC CONTROL'S policy of continuous improvement. Not all products are available at the time of printing.
Specifications may be subject to change. The DX system is TUV certified. All released DX2 modules are currently TUV certified.